

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- At time of the Action: Claims 1-38.
- After this Response: Claims 1-48.

Canceled or Withdrawn claims: none.

Amended claims: none.

New claims: 39-48.

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Claims:

1. (ORIGINAL) A method for facilitating speedy communication of packets between entities on a network, the method comprising:

sending a delay-disable command;

sending a set of packets from a sending entity to a receiving entity.

2. (ORIGINAL) A method as recited in claim 1, wherein the set of packets includes two packets sent back-to-back.

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1 3. (ORIGINAL) A method as recited in claim 1, wherein the set of
2 packets consists of a first bandwidth-measurement packet and a second
3 bandwidth-measurement packet, wherein the second packet is sent immediately
4 after the first packet.

5
6 4. (ORIGINAL) A method as recited in claim 1, wherein the network is
7 TCP.

8
9 5. (ORIGINAL) A method as recited in claim 1, wherein the delay-
10 disable command disables the Nagle Algorithm on one or more communication
11 devices on the network.

12
13 6. (ORIGINAL) A method as recited in claim 1, wherein the delay-
14 disable command is TCP_NODELAY.

15
16 7. (ORIGINAL) A program module having computer-executable
17 instructions that, when executed by a computer, performs the method as recited in
18 claim 1 at an application layer in accordance with an OSI model.

19
20 8. (ORIGINAL) A computer-readable medium having computer-
21 executable instructions that, when executed by a computer, performs the method
22 as recited in claim 1.

1 9. **(ORIGINAL)** A method for facilitating speedy communication of
2 packets between entities on a network, the method comprising:

3 sending a set of packets from a sending entity to a receiving entity, wherein
4 a transmission delay between packets in the set is intolerable;

5 immediately thereafter, sending at least one "push" packet to avert a
6 transmission delay between packets in the set, wherein the delay is caused by
7 packet buffering of a communication device on the network.

8
9 10. **(ORIGINAL)** A method as recited in claim 9, wherein the set of
10 packets includes two packets sent back-to-back.

11
12 11. **(ORIGINAL)** A method as recited in claim 9, wherein the set of
13 packets are bandwidth-measurement packets for measuring bandwidth between the
14 sending entity and the receiving entity.

15
16 12. **(ORIGINAL)** A method as recited in claim 9, wherein the
17 communication device is a proxy server.

18
19 13. **(ORIGINAL)** A method as recited in claim 9, wherein the network is
20 TCP.

21
22 14. **(ORIGINAL)** A program module having computer-executable
23 instructions that, when executed by a computer, performs the method as recited in
24 claim 9 at an application layer in accordance with an OSI model.
25

1 **15. (ORIGINAL)** A computer-readable medium having computer-
2 executable instructions that, when executed by a computer, performs the method
3 as recited in claim 9.

4
5 **16. (ORIGINAL)** A method for facilitating speedy communication of
6 packets between entities on a network, the method comprising:

7 sending a set of packets from a sending entity to a receiving entity, wherein
8 a transmission delay between packets in the set is intolerable;

9 immediately before, sending at least one "priming" packet to avoid a
10 transmission delay between packets in the set, wherein the delay is caused by
11 flow-control functions of a communication device on the network.

12
13 **17. (ORIGINAL)** A method as recited in claim 16, wherein the set of
14 packets includes two packets sent back-to-back.

15
16 **18. (ORIGINAL)** A method as recited in claim 16, wherein the set of
17 packets are bandwidth-measurement packets for measuring bandwidth between the
18 sending entity and the receiving entity.

19
20 **19. (ORIGINAL)** A method as recited in claim 16, wherein the network
21 is TCP.

1 20. **(ORIGINAL)** A method as recited in claim 16 further comprising
2 establishing a TCP connection between the sending entity to the receiving entity,
3 wherein the establishing is just before the sending of the set of packets.

4
5 21. **(ORIGINAL)** A method as recited in claim 16, wherein the flow-
6 control function is the Slow Start Algorithm.

7
8 22. **(ORIGINAL)** A program module having computer-executable
9 instructions that, when executed by a computer, performs the method as recited in
10 claim 16 at an application layer in accordance with an OSI model.

11
12 23. **(ORIGINAL)** A computer-readable medium having computer-
13 executable instructions that, when executed by a computer, performs the method
14 as recited in claim 16.

15
16 24. **(ORIGINAL)** A method for facilitating bandwidth measurement
17 between two entities on a network, the method comprising:

18 sending a delay-disable command;

19 sending a pair of bandwidth-measurement packets from a sending entity to
20 a receiving entity.

21
22 25. **(ORIGINAL)** A method as recited in claim 24 further comprising
23 receiving a bandwidth calculation based upon measurements related to the pair of
24 packets.

1 **26. (ORIGINAL)** A method for facilitating bandwidth measurement
2 between two entities on a network, the method comprising:

3 sending a pair of bandwidth-measurement packets from a sending entity to
4 a receiving entity, wherein a transmission delay between packets in the pair is
5 intolerable;

6 immediately thereafter, sending at least one "push" packet to avert a
7 transmission delay between packets in the pair, wherein the delay is caused by
8 packet buffering of a communication device on the network.

9
10 **27. (ORIGINAL)** A method as recited in claim 26 further comprising
11 receiving a bandwidth calculation based upon measurements related to the pair of
12 packets.

13
14 **28. (ORIGINAL)** A method for facilitating bandwidth measurement
15 between two entities on a network, the method comprising:

16 sending a pair of bandwidth-measurement packets from a sending entity to
17 a receiving entity, wherein a transmission delay between packets in the pair is
18 intolerable;

19 immediately before, sending at least one "priming" packet to avoid a
20 transmission delay between packets in the pair, wherein the delay is caused by
21 flow-control functions of a communication device on the network.

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1 **29. (ORIGINAL)** A method as recited in claim 28 further comprising
2 receiving a bandwidth calculation based upon measurements related to the pair of
3 packets.

4
5 **30. (ORIGINAL)** A computer-readable medium having computer-
6 executable instructions that, when executed by a computer, perform a method to
7 facilitate speedy communication of packets between entities on a network, the
8 method comprising:

9 sending a delay-disable command;

10 sending a set of packets from a sending entity to a receiving entity.

11
12 **31. (ORIGINAL)** A computer-readable medium having computer-
13 executable instructions that, when executed by a computer, perform a method to
14 facilitate speedy communication of packets between entities on a network, the
15 method comprising:

16 sending a set of packets from a sending entity to a receiving entity, wherein
17 a transmission delay between packets in the set is intolerable;

18 immediately thereafter, sending at least one "push" packet to avert a
19 transmission delay between packets in the set, wherein the delay is caused by
20 packet buffering of a communication device on the network.

1 **32. (ORIGINAL)** A computer-readable medium having computer-
2 executable instructions that, when executed by a computer, perform a method to
3 facilitate speedy communication of packets between entities on a network, the
4 method comprising:

5 sending a set of packets from a sending entity to a receiving entity, wherein
6 a transmission delay between packets in the set is intolerable;

7 immediately before, sending at least one "priming" packet to avoid a
8 transmission delay between packets in the set, wherein the delay is caused by
9 flow-control functions of a communication device on the network.

10
11 **33. (ORIGINAL)** An apparatus comprising:

12 a processor;

13 a transmission-delay avoider executable on the processor to:

14 send a delay-disable command;

15 send a set of packets from a sending entity to a receiving entity.

16
17 **34. (ORIGINAL)** An apparatus comprising:

18 a processor;

19 a transmission-delay avoider executable on the processor to:

20 send a set of packets from a sending entity to a receiving entity,
21 wherein a transmission delay between packets in the set is intolerable;

22 immediately thereafter, send at least one "push" packet to avert a
23 transmission delay between packets in the set, wherein the delay is caused
24 by packet buffering of a communication device on the network.
25

1 **35. (ORIGINAL)** An apparatus comprising:

2 a processor;

3 a transmission-delay avoider executable on the processor to:

4 , send a set of packets from a sending entity to a receiving entity,
5 wherein a transmission delay between packets in the set is intolerable;

6 immediately before, send at least one “priming” packet to avoid a
7 transmission delay between packets in the set, wherein the delay is caused
8 by flow-control functions of a communication device on the network.

9
10 **36. (ORIGINAL)** A modulated data signal having data fields encoded
11 thereon transmitted over a communications channel, comprising:

12 a first field including a delay-disable command;

13 a second field including a first bandwidth-measurement packet;

14 a third field including a second bandwidth-measurement packet.

15
16 **37. (ORIGINAL)** A modulated data signal having data fields encoded
17 thereon transmitted over a communications channel, comprising:

18 a first field including a first bandwidth-measurement packet;

19 a second field including a second bandwidth-measurement packet;

20 a third field including a “push” packet facilitating minimization of
21 transmission delay between the first and second packets, wherein the delay is
22 caused by packet buffering of a communication device on the network.

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1 38. (ORIGINAL) A modulated data signal having data fields encoded
2 thereon transmitted over a communications channel, comprising:
3 a first field including a "priming" packet;
4 a second field including a first bandwidth-measurement packet;
5 a third field including a second bandwidth-measurement packet;
6 wherein the "priming" packet facilitates minimization of transmission delay
7 between packets, wherein the delay is caused by flow-control functions of a
8 communication device on the network.

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Newly Added Claims

A2 39. (NEWLY ADDED) A method as recited in claim 1, wherein the delay-disable command is sent by the receiving entity to the sending entity.

40. (NEWLY ADDED) A method as recited in claim 24, wherein the delay-disable command is sent by the receiving entity to the sending entity.

41. (NEWLY ADDED) A method for facilitating speedy communication of packets between entities on a communications network, the method comprising:

sending a delay-disable command to direct a disablement of a communications delay imposed by one or more communication devices on a communications network;

while the communications delay is disabled, sending a set of packets from a sending entity to a receiving entity.

42. (NEWLY ADDED) A method as recited in claim 41, wherein the set of packets includes two packets sent back-to-back.

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1 **43. (NEWLY ADDED)** A method as recited in claim 41, wherein the set
2 of packets consists of a first bandwidth-measurement packet and a second
3 bandwidth-measurement packet, wherein the second packet is sent immediately
4 after the first packet.

5
6 **44. (NEWLY ADDED)** A method as recited in claim 41, wherein the
7 network is TCP.

8
9 **45. (NEWLY ADDED)** A method as recited in claim 41, wherein the
10 delay-disable command disables the Nagle Algorithm on one or more
11 communication devices on the network.

12
13 **46. (NEWLY ADDED)** A method as recited in claim 41, wherein the
14 delay-disable command is TCP_NODELAY.

15
16 **47. (NEWLY ADDED)** A program module having computer-executable
17 instructions that, when executed by a computer, performs the method as recited in
18 claim 41 at an application layer in accordance with an OSI model.

19
20 **48. (NEWLY ADDED)** A computer-readable medium having computer-
21 executable instructions that, when executed by a computer, performs the method
22 as recited in claim 41.